PHASE CONTROLLED OSCILLATOR

ABSTRACT OF THE DISCLOSURE

An oscillating signal in an oscillator is caused to phase shift toward the phase of an input signal coupled to the oscillating signal. The resonant frequency of the oscillator is about equal to an integer multiple of the frequency of the input signal. The input signal may be generated in a pulse generator to have an input pulse duration less than or equal to that of the oscillating signal. The oscillator circuit may be used as a filter to filter pulse width variations or to filter jitter from a reference clock. The oscillator circuit may also serve as a buffer by amplifying the input signal. Phase interpolation can be obtained by coupling at least one input signal with at least one oscillating signal.